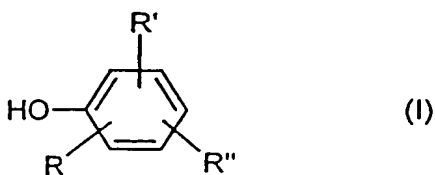
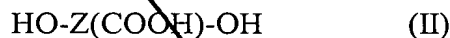


Patent Claims

- 5 1. Solvent-free, low-branching, thermoplastic, aromatic polycarbonates prepared by the transesterification process and having weight-average molecular weights M_w of from 2000 to 150,000, preferably from 4500 to 55,000, based on diphenols, chain terminators of formula (I)



- 10 wherein R, R' and R'' may each independently of the others represent H, optionally branched C_1 - C_{34} -alkyl/cycloalkyl, C_7 - C_{34} -alkaryl or C_6 - C_{34} -aryl, and, optionally, branching agents, characterised in that structural elements of formula (II)



- 15 have a value after total saponification and HPLC determination of less than 300 ppm, Z being as defined for formula (VI) and the acid group being in the ortho position relative to a hydroxy group.

- 20 2. Polycarbonates according to claim 1, characterised in that the end groups consist of alkylphenol end groups to the extent of more than 30% of the reacted end groups.

- 25 3. Polycarbonates according to one of the above-mentioned claims, characterised in that structural elements of formula (II) have a value after total saponification and HPLC determination of from 0.03 ppm to 250 ppm.

~~4. Process for the preparation of the low-branching polycarbonates according to the invention, characterised in that phosphonium salts are used as catalyst.~~

5. Process according to claim 4, in which the catalyst is used in concentrations of from 10^{-2} mol to 10^{-6} mol, based on 1 mol of diphenol.

~~6. Process according to claim 4 or 5, characterised in that the catalyst is tetraphenylphosphonium phenolate.~~

10 ~~7. Use of the low-branching, solvent-free, aromatic polycarbonates according to the invention for the production of moulded bodies and semi-finished products, especially for transparent applications, such as data stores or audio compact disks, sheets, multi-wall sheets, films, lamp housings, panes, especially panes for motor vehicles, headlamp lenses, but also for electrical applications or house building.~~

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